

January 17, 2018

Exhibit 20

Development of Sage Grouse Mitigation:

Special Focus on HQT

Montana Sage Grouse Oversight Team
December 15, 2017

*Presentation and all meeting materials will be available on the MSGOT
Meeting Archive webpage at: <https://sagegrouse.mt.gov/Team>*

HQT: the scientific method to evaluate
vegetation and environmental conditions
related to quality and quantity of habitat

MCA 76-22-103(9)

- A GIS model
- Key variables:
 - vegetation & birds
 - existing disturbance
- Answers the questions:
 - What's the habitat quality before the conservation or development project?
 - What happened to the habitat after the project?

HQT to Estimate Debits

- Baseline map: habitat quality
- Project type, size, etc.
- Location on the landscape: core, general, or connectivity
- Site & project specific: direct and indirect effects
- Time: construction + operation + reclamation
 - reclamation is the number of years for site and vegetation to return to pre-project condition
- RESULT: single number "raw HQT" score
- Total mitigation obligation expressed as DEBITS:
raw HQT score + policy modifiers

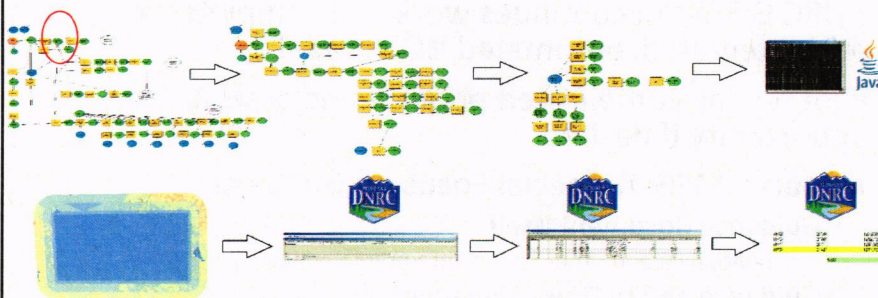
HQT to Estimate Credits

- Baseline map: habitat quality
- Project type, size, etc.
 - restoration, enhancement, preservation
- Location on the landscape: core, general, or connectivity
- Time
 - if easement: assume perpetuity means 100 years
- RESULT: single number "raw HQT" score
- Conservation expressed as CREDITS = raw HQT score
+ policy modifiers

Journey to Date:

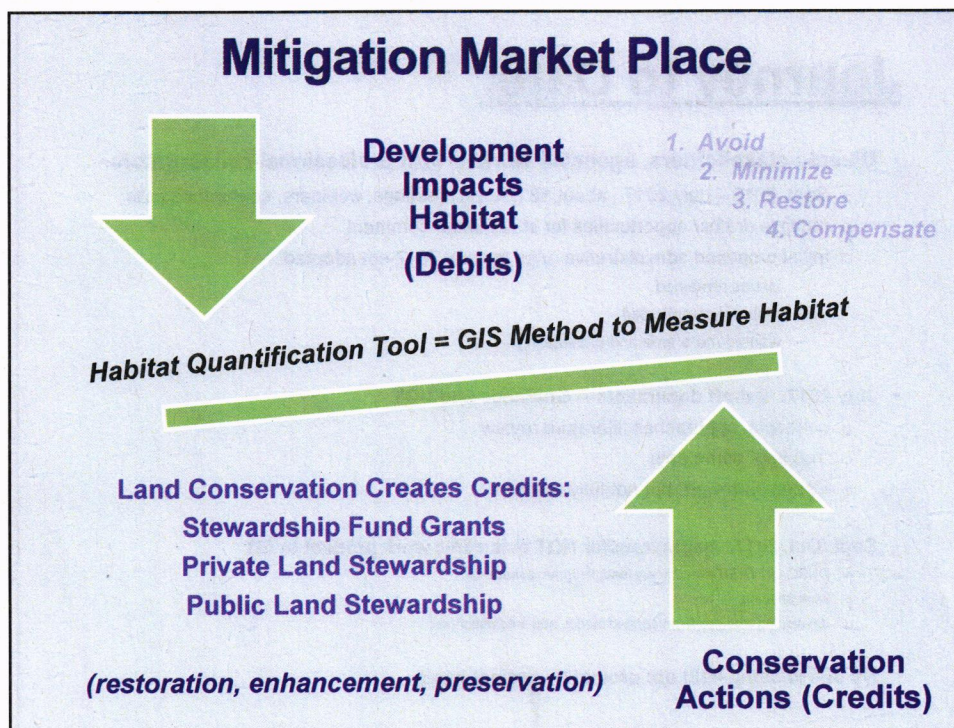
- **Diverse stakeholders, agencies worked with professional collaborators**
 - Sept. 2016 – July 2017: about 12 (2-day) meetings, webinars, conference calls
 - multiple drafts / opportunities for stakeholder comment
 - initial proposed administrative rules in early 2017 not adopted
 - issues remained
 - material complicated
 - wanted more time and pilot testing
- **July 2017: 2 draft documents -- Guidance and HQT**
 - concepts, approaches, literature review
 - "red flag" comments
 - issues narrowed, but not fully resolved
- **Sept./Oct. 2017: begin transfer HQT electronic work product to MT**
 - DNRC OIT GIS Team primary lead; Program assistance
 - work ongoing
 - developing a complete, integrated model, add automation, etc.
- **No one is being held up; project by project basis**

DNRC GIS Team started with simplified, partial electronic work product.



DNRC GIS Team kept working to build the HQT model to get farther along and closer to implementation:

- an HQT model that proponents can use themselves, proactively
- will simplify future RFP to add to Program's website



Suggested Next Steps:

- DNRC GIS Team continues work and completes a fully integrated, automated HQT model
- Pilot testing complicated projects and Stakeholder opportunity if desired
- January: MSGOT Special Focus on Guidance
 - Guidance document itself
 - multipliers and other important unresolved issues
 - Guidance and HQT working together
- Finalize documents
- Propose rules: general, "circular" approach and point to the documents